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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/694,258	10/27/2003	Gregory P. Brown	81085388 (201-0709)	4121
28415	7590	03/08/2005	EXAMINER	
PRICE, HENEVELD, COOPER, DEWITT & LITTON, LLP 695 KENMOOR S.E. P. O. BOX 2567 GRAND RAPIDS, MI 49501-2567			LIEU, JULIE BICHNGOC	
			ART UNIT	PAPER NUMBER
			2636	

DATE MAILED: 03/08/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/694,258	BROWN ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Julie Lieu	2636	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 27 October 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |                                                                                                    |                                                                             |
|----------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                        | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)               | Paper No(s)/Mail Date. _____                                                |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>10/27/03</u> .                                                            | 6) <input type="checkbox"/> Other: _____                                    |

## DETAILED ACTION

### *Claim Rejections - 35 USC § 103*

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

2. Claims 1-4, 6-10, and 12-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Beissbarth (US Patent No. 4,860,457).

#### Claim 9:

Beissbarth discloses a wheel position indication system for a vehicle, comprising:

- a. a steerable wheel 2;

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b. a wheel position indicator 38L having an on state and an off state (inherent), the wheel position indicator providing a visual indication of the position of the steerable wheel when the wheel position indicator is in the on state, the wheel position indicator not providing a visual indication of the position of the steerable wheel when the wheel position indicator is in the off state

c. a controller 60, wherein the controller places the wheel position indicator into the on state when the vehicle is in an off road condition and places the wheel position indicator into the off state when the vehicle is not in the off road condition.

The reference fails to disclose the controller selectively altering the wheel position indicator between the ON state and the OFF state. However, one of ordinary skill in the art would have readily recognized that when the vehicle is in use the indicator should be in the ON state to provide information and when the vehicle is not in use or not driven the indicator should be put in the OFF state to save power.

Claim 10:

It is not clear where and what the display is mounted and connected to, respectively, in Beissbarth. Nevertheless, the location of a device would not constitute an inventive step because the function of the device would not thereby be modified. It is only up to the implementer's discrete to choose a location convenient to mount the display so long as it would be easy to be viewed by the designated viewer and would not interfere with the vehicle operation.

Claim 12:

It is not discussed in the reference whether the displaying Beissbarth is a digital display. However, the use of a digital display versus analog display would not constitute an inventive step

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because they are functionally equivalent. It would be a designer's choice as which type should be used depending on its availability, feasibility and cost.

Claim 13:

Beissbarth discloses that the position of the steerable wheel includes an angle of the steerable wheel relative to a traverse axis of the vehicle. Nevertheless, it would have been obvious to one skilled in the art to use a wheel position relative to longitudinal axis of the vehicle because they are functionally equivalent and can be derived from one another.

Claim 14:

In Beissbarth, the position of the steerable wheel includes a left or a right position of the steerable wheel relative to a traverse axis of the vehicle. Nevertheless, it would have been obvious to one skilled in the art to use a wheel position relative to longitudinal axis of the vehicle because they are functionally equivalent and can be derived from one another.

Claim 15:

Beissbarth discloses a wheel position indication system for a vehicle, comprising:

- a. a steerable wheel 2;
- b. a wheel position indicator 38L having an on state and an off state (inherent), the wheel position indicator providing a visual indication of the position of the steerable wheel when the wheel position indicator is in the on state, the wheel position indicator not providing a visual indication of the position of the steerable wheel when the wheel position indicator is in the off state

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c. a controller 60, wherein the controller places the wheel position indicator into the on state when the vehicle is in an off road condition and places the wheel position indicator into the off state when the vehicle is not in the off road condition.

The reference fails to disclose the controller selectively altering the wheel position indicator between the ON state when the wheel has a slip angle above or equal to a predetermined amount and an OFF state when the wheel has a slip angle below the predetermined amount. However, one of ordinary skill in the art would have readily recognized that it would be desirable to display information only when necessary, such as when the slip angle is above a predetermined amount. This is only a matter of choice when the information should be display, thus, does not present an inventive step.

Claims 16 and 18-20:

The rejection of claims 16 and 18-20 recites the rejection of claim 10, and 12-14, respectively.

Claims 1 and 2:

The rejection of claims 1 and 2 recites the rejection of claim 1, except they are method claims.

Claim 3:

The reference fails to disclose the controller selectively altering the wheel position indicator between the ON state when the wheel has a slip angle above or equal to a predetermined amount and an OFF state when the wheel has a slip angle below the predetermined amount. However, one of ordinary skill in the art would have readily recognized that it would be desirable to display information only when necessary, such as when the slip

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angle is above a predetermined amount. This is only a matter of choice when the information should be display, thus, does not present an inventive step.

Claims 4 and 6-8:

The rejection of claims 4 and 6-8 recites the rejection of claims 10 and 12-14, respectively, except they are method claims.

3. Claims 5, 11, and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Beissbarth (US Patent No. 4,860,457) in view of Ashrafi et al. (US Patent No. 5,742,918).

Claims 5, 11 and 17:

Beissbarth fails to discuss the use of steering wheel sensor to detect the steering angle of the steerable wheel. However, the use of a sensor attached to a vehicle's steering column to determine the steering angle position which in turn provide information of the angle of a steerable wheel is well known in the art as taught in Ashrafi. In light of this teaching, one skilled in the art would have readily recognized using a steering angle sensor in the system of Beissbarth as desired because the steering angle position is directly related to the position of the steerable wheel.

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Julie Lieu whose telephone number is 571-272-2978. The examiner can normally be reached on Mon-Fri 9AM-6PM.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jeffrey Hofsass can be reached on 571-272-2981. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

A handwritten signature in black ink, appearing to read 'Julie Lieu', with a long horizontal line extending to the right.

Julie Lieu  
Primary Examiner  
Art Unit 2636

Mar. 3, 05